M4380 1998-85

BEFORE

THE PUBLIC SERVICE COMMISSION

OF

SOUTH CAROLINA

DOCKET NO. 2005-58-E

In Re: Application of South Carolina	,
Electric & Gas Company for a	`
Certificate of Environmental)
Compatibility and Public Convenience	
and Necessity for the Construction and	`
Operation of 230 kV Transmission Lines	
and Hopkins 230/115 kV Substation	,

ORDER GRANTING CERTIFICATE
OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC
CONVENIENCE AND NECESSITY

This matter is before the Public Service Commission of South Carolina ("Commission") on the Application of South Carolina Electric & Gas Company ("SCE&G") for a Certificate of Environmental Compatibility and Public Convenience and Necessity pursuant to the Utility Facility Siting and Environmental Protection Act ("the Siting Act"). S.C. Code Ann. §§ 58-33-10 et seq. (1976 & Supp. 2004). Through its Application, SCE&G seeks authority to construct and operate new 230 kV transmission lines in southeastern Richland County ("Transmission Lines") and an associated 230/115 kV substation to be located near Hopkins, South Carolina ("Hopkins Substation") (collectively, "Transmission Lines and associated Hopkins Substation"). According to the Application, the Transmission Lines and associated Hopkins Substation are needed to improve system economy and reliability for customers in the southeastern Richland County area of the SCE&G electric system.

Prior to the submission of the Application, SCE&G published notice, as required by S.C. Code Ann. § 58-33-120(3), of its intent to apply for a Certificate of Environmental Compatibility

and Public Convenience and Necessity under the Siting Act. Proof of publication of a Notice of Filing was provided with the Application. In addition, SCE&G provided a Proof of Service to demonstrate compliance with S.C. Code Ann. § 58-33-120(2).

Upon the filing of SCE&G's Application, the Commission issued and served by certified mail all of the parties listed in SCE&G's Proof of Service with a Notice of Filing and Hearing which described the nature of the Application and advised the interested parties of the manner in which they might intervene or otherwise participate in this proceeding. Pursuant to S.C. Code Ann. § 58-33-140(1)(c) and (d), parties seeking to intervene must do so within thirty (30) days from service of the application. No such petitions have been received, and no person or entity other than the Office of Regulatory Staff ("ORS") indicated an intent to participate in the hearing.

On June 9, 2005, in accordance with S.C. Code Ann. § 58-33-130 of the Siting Act and the Commission's Rules of Practice and Procedure, the Commission conducted an evidentiary hearing in this proceeding. SCE&G was represented by Catherine D. Taylor, Esquire, Assistant General Counsel for SCE&G, and Paige J. Gossett, Esquire. The Office of Regulatory Staff was represented by C. Lessie Hammonds, Esquire. The statutory parties named in S.C. Code Ann. § 58-33-140(1)(b) did not participate in the hearing.

At the hearing, SCE&G presented the testimony of Hubert C. Young, III, and Dwight M. Hollifield. ORS presented no witnesses.

SUMMARY OF TESTIMONY

Hubert C. Young, III

SCE&G presented the testimony of Hubert C. Young, III, SCE&G's Manager of Transmission Planning. Young testified that, if approved, the proposed Transmission Lines and associated Hopkins Substation would be constructed in southeastern Richland County. He testified that the project includes the construction of new 230 kV transmission lines as a fold-in and out of the existing Wateree-Columbia Energy 230 kV transmission line into the new Hopkins Substation. This fold-in and -out is proposed to be approximately 1.32 miles one way and would be built on a new right-of-way originating at the existing Wateree-Columbia Energy 230 kV line and connecting to the new Hopkins Substation.

The associated substation will be called the Hopkins 230/115 kV Substation and will be located on the Westinghouse Electric Company property off of Bluff Road. The Hopkins Substation will include a 230/115 kV - 336 MVA transformer, two 230 kV transmission line terminals, three 115 kV transmission line terminals, and one 115 kV bus-tie breaker.

Young testified that SCE&G subscribes to the Planning Standards and Guides established by the North American Electric Reliability Council and SCE&G's Long Term Planning Criteria. In accordance with these criteria, the SCE&G transmission system is designed such that during contingencies, only short-time overloads, low voltages, and local loss of load will occur and after appropriate switching and re-dispatching all facilities can again operate within acceptable limits. Young testified that the Transmission Lines and associated Hopkins Substation are needed to

serve system reliability and to satisfy the NERC and Company planning standards and criteria. The addition of these facilities will improve the reliability of electric service to customers in the southeastern Richland County area bounded by the Congaree River, Fort Jackson, and the edge of the SCE&G service territory near Eastover, South Carolina (known as the Columbia Southeastern and Lower Richland area). The proposed project will provide backup service for power in the event that the sole existing transmission substation in the area should fail for any reason.

Young further testified that the Columbia Southeastern and Lower Richland area has a total customer load of approximately 220 megawatts, representing approximately 25,000 customers, which is currently served through five 115 kV distribution substations and four single customer substations. He stated that all of these substations and therefore the total 220 MW of customer load are served from the existing Columbia Industrial Park 230/115 kV substation located on Bluff Road. In the past, following any event in the Industrial Park Substation that caused the substation to fail or become unavailable, customer load in this area would be served by two other 115 kV transmission lines extending into the area. The power flowing on these two 115 kV transmission lines during an outage at the Industrial Park substation has now reached the capacity of the lines and these lines can no longer provide backup service for the entire 220 MW of customer load in the area. Young testified that an improved backup service for the customers in this area is therefore needed. The Transmission Lines and the associated Hopkins Substation provide this improved backup service.

Further, Young stated that the proposed facilities serve system economy in two ways. First, this proposal is the least expensive and best long-term solution to increase reliability for the customers in the Columbia Southeastern and Lower Richland area. SCE&G Transmission Planning considered several alternatives to provide the needed improvement. Young testified that one alternative considered was to increase the capability of the two overloaded 115 kV transmission lines to carry more customer load. A second alternative considered was to install a second 230/115 kV transformer in the existing Industrial Park Substation. Young testified that each of these alternatives is more expensive and only provides a short-term solution. He testified further that even with the line improvements, studies indicate that as customer load continues to grow in the area service voltages will decline to unacceptable levels, and a second transformer at the Industrial Park Substation creates a very heavy dependency on that substation. Thus, Young stated, if an outage occurs at the substation there is no other adequate source to serve customer load in the area. Because both of these alternatives are short-term solutions, additional transmission improvements and costs would be required in the near future.

Second, Young stated, the proposed facilities also serve system economy by increasing the efficiency of SCE&G's physical plant operations in that the construction of the Transmission Lines and associated Hopkins Substation permits SCE&G to split the load on its facilities, which is more efficient. Splitting the load between the existing and proposed transmission lines and substations ensures that the equipment is not overloaded and provides for less energy loss over the lines.

Young stated that the cost of construction for the Transmission Lines and the associated Hopkins Substation is \$4,830,000, and that, if approved, the lines and substation are scheduled to be in service in June 2006.

Dwight M. Hollifield

SCE&G also presented the testimony of Dwight M. Hollifield, who is employed by a firm retained by SCE&G to conduct an environmental study regarding the proposed project. This environmental study was attached as an exhibit to Mr. Hollifield's prefiled testimony and introduced into evidence at the hearing.

This study shows, and Mr. Hollifield testified, that SCE&G conducted a comprehensive line siting study to determine the route for the proposed Transmission Lines. Data was collected to characterize the project area and to identify any environmental, land use, or cultural resource factors that should be taken into consideration during the siting study. After mapping an array of data, SCE&G determined that routing the proposed Transmission Lines parallel to its existing Westinghouse 115kV Line for approximately one-half of its total length would be superior to any alternate route. Mr. Hollifield testified that based on his experience with conducting comparative evaluations of alternate transmission line routes through the application of quantifiable and qualitative environmental, land use, cultural resource, and visual resource factors, the chosen proposed route is measurably superior to any alternative route.

Mr. Hollifield further testified that the construction and operation of the Transmission Lines and associated Hopkins Substation will not have any significant short- or long-term impacts on the environment. Wetlands crossed by the Transmission Lines will be spanned, and no wetlands will be affected by the Hopkins Substation. No rare, threatened, or endangered species will be adversely impacted by the project. Additionally, the Transmission Lines and associated Hopkins Substation will have no adverse effects on historic sites or historic districts, and is located in a remote area on private property and will not be visible from public roads, commercial facilities, public facilities, or private residences.

FINDINGS OF FACT

Based upon the record before it, the Commission makes the following Findings of Fact:

- 1. South Carolina Electric & Gas Company is engaged in the business of generating, transmitting, distributing, and selling electric power and energy to the general public within South Carolina and is subject to the jurisdiction of the Commission.
- 2. SCE&G proposes to construct new 230 kV transmission lines and an associated substation to be located in southeastern Richland County near Hopkins, South Carolina.
- 3. The project includes the construction of new 230 kV transmission lines as a foldin and -out of the existing Wateree-Columbia Energy 230 kV transmission line into the new Hopkins substation. This fold-in and -out is proposed to be approximately 1.32 miles one way and would be constructed partially on an existing right-of-way and partially on a new right-of-way originating at the existing Wateree-Columbia Energy 230 kV line and connecting to the new Hopkins substation.

- 4. The Transmission Lines and associated Hopkins Substation are needed to improve system economy and reliability for customers in the southeastern Richland County area of the SCE&G electric system. The project is needed to provide backup for the 220 MW of customer load in the Columbia Southeastern and Lower Richland area. The existing 115 kV transmission lines running into the area and currently providing backup for the Columbia Southeastern and Lower Richland area have reached capacity. The Transmission Lines and Hopkins Substation will provide this necessary backup in the event of failure or unavailability of the Columbia Industrial Park substation, which is currently the only substation serving that area. Accordingly, the Commission finds that public convenience and necessity will be served by the proposed facility.
- 5. The environmental study that was performed shows that the proposed Transmission Lines and associated Hopkins Substation will not have any significant environmental impacts on land use, vegetation, wildlife, threatened or endangered species, jurisdictional wetlands, designated floodplains, or floodways. The project is located in a remote, rural area. Part of the Transmission Lines will be constructed parallel to an existing transmission line, resulting in negligible environmental effects for that section of the Transmission Lines.
- 6. No wetlands will be affected by the construction of the Hopkins Substation, and the minimal wetlands area located in the right-of-way will be spanned. Further, no state or federally listed rare, threatened, or endangered species or unique habitats were found for the proposed Transmission Lines and Hopkins Substation project area.

- 7. No significant cultural resources will be affected by the proposed construction.
- 8. Any impact of the project on the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations.
- 9. The proposed project will serve the interests of system economy and reliability. The proposed project is an economic solution to the need to back up the customer load in the southeastern Richland County area. Without the proposed project, the reliability of service to the customers in that area is suspect under some circumstances.
- 10. There is reasonable assurance that the proposed project will conform to applicable State and local laws and regulations issued thereunder.
- 11. The public convenience and necessity require the construction of the proposed project.
- 12. SCE&G and the Commission have met all statutory requirements for notice and opportunity for hearing as required by the Siting Act.

CONCLUSIONS OF LAW AND DISCUSSION

1. SCE&G has demonstrated the basis of the need for the proposed project. It is clear to this Commission that without the addition of the Transmission Lines and associated Hopkins Substation, the reliability of service, under certain circumstances, to the residents of the Columbia Southeastern and Lower Richland area becomes suspect. The addition of this project will provide the necessary backup service for the area.

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- 2. The nature of the probable environmental impact is minimal. According to SCE&G's environmental consultant Dwight Hollifield, a thorough analysis conducted by Mr. Hollifield and his firm showed that the proposed project will not result in any significant environmental impacts on land use, vegetation, wildlife, threatened or endangered species, jurisdictional wetlands, designated floodplains or floodways, or on archeological sites.
- 3. The impact of the proposed project upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. SCE&G has carefully considered alternatives to the proposed project, and has validly rejected these alternatives.
- 4. The proposed project will serve the interests of system economy and reliability, as discussed earlier in this Order and in Item No. 1 of this subsection of the Order.
- 5. There is reasonable assurance that the proposed project will conform to applicable State and local laws and regulations issued thereunder.
- 6. The public convenience and necessity require the construction of the proposed project. As we have stated above, the Columbia Southeastern and Lower Richland area needs back-up service. This project would provide that backup and ensure reliability of the system.

IT IS THEREFORE ORDERED THAT:

1. The Application of SCE&G for a Certificate of Environmental Compatibility and Public Convenience and Necessity be and hereby is approved, and accordingly, the Certificate is granted.

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- 2. SCE&G shall notify the Commission's Chief Clerk and Administrator of the commercial operation of the Transmission Lines and associated Hopkins Substation described in the Application within ten (10) days of such operation.
- 3. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

	Chairman	
ATTEST:		
Vice Chairman	-	
(SEAL)		